UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER
BENGZON, GREG C

ART UNIT	PAPER NUMBER
2144	

DATE MAILED: 06/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	09/965,814	SHNIER, J. MITCHELL
	Examiner	Art Unit	
	Greg Bengzon	2144	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _08 April 2005_.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _23-34_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _23-34_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _10/01/2001_ is/are: a)☐ accepted or b)☒ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

This application has been examined. Claims 1-22 are cancelled. Claims 23-34

have been submitted as new Claims and are pending.

Priority

The effective date of the subject matter described in the claims of this application

is October 1, 2001.

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show

every feature of the invention specified in the claims. Therefore, the following features

as described in the Claims shown below, must be shown or the feature(s) canceled

from the claim(s). No new matter should be entered.

Claim 23 cites a limitation for 'compactly representing ... an existing sequence of

references...'

Claim 23 cites a limitation 'to determine said predictable pattern' for said existing

sequence of references.

Claim 23 cites a limitation for 'creating a customized template, said template

comprising at least; said non-changing part, and one or more replacement indicators

selected to both indicate said predictable pattern, as well as the position in said

reference where said predictable pattern occurs.'

Claim 23 cites a limitation for 'later applying an index value to said references to construct any specific reference, whereby rather than needing to store, and add to when necessary, the entire sequence of references to said desired information, any specific reference can be constructed by applying said index value to said customized template'.

Claim 23 cites a limitation 'whereby a user can unilaterally construct a reference to periodically-updated desired information which is available elsewhere on a network'.

Claim 29 cites a limitation 'whereby users can utilize said record to distinguish between information which has and has not been previously received, whereby users can choose to only receive information which they have not received before.'

Claim 30 cites a limitation 'wherein said desired information is received in its entirety and stored locally by users before being utilized, whereby said desired information can utilized at a later time.'

Claim 31 cites a limitation 'wherein said information is streaming media which is played substantially as it is received, whereby said streaming media can be utilized sooner, while it is still being received.'

Claim 32 cites a limitation 'wherein a record is maintained of the reference corresponding to streaming media which has not been received completely because the reception of said streaming media was stopped, said record indicating the number of seconds of streaming media which was received and played before playback was stopped.'

Claim 33 cites a limitation 'wherein said record is stored at said database and can be retrieved from anywhere on said communications network, whereby a user at a first location on said communications network can begin receiving streaming media and later stop receiving said streaming media and still later, from a second location elsewhere on said communications network and based on the content of said retrieved record, said user can resume receiving said partially-received streaming media starting at the point at which playback was stopped.'

Claim 34 cites a limitation 'wherein a user can resume receiving said partially-received streaming at the point at which playback was stopped, whereby an interrupted word or sentence can be replayed in its entirety, followed by the remainder of said partially-received streaming media.'

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering

of the remaining figures. Each drawing sheet submitted after the filing date of an

application must be labeled in the top margin as either "Replacement Sheet" or "New

Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner,

the applicant will be notified and informed of any required corrective action in the next

Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 23 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply

with the enablement requirement. The claim(s) contains subject matter which was not

described in the specification in such a way as to enable one skilled in the art to which it

pertains, or with which it is most nearly connected, to make and/or use the invention.

Claim 23 cites a limitation for 'compactly representing ... an existing sequence of

references...' The Examiner notes that the Applicant Specifications do not sufficient

disclose any methods for data compression for decreasing the length of the reference

expression. Furthermore the phrase 'compactly representing' is indicative of a change

from the original representation of the reference URL and thus raises issues for 'exactly

matching' with an existing URL (in its original format).

Claim 23 cites a limitation 'to determine said predictable pattern'. The Examiner

notes that the Applicant Specifications do not sufficiently disclose methods for

determining said predictable pattern.

Though the statute does not use the term "undue experimentation," it has been

interpreted to require that the claimed invention be enabled so that any person skilled in

the art can make and use the invention without undue experimentation. The test of

enablement is whether one reasonably skilled in the art could make or use the invention

from the disclosures in the patent coupled with information known in the art without

undue experimentation.

The Examiner notes that specification was not enabling with respect to the said

claims at issue, noting further that there was no considerable direction and guidance in

the specification; that there was no evidence presented by the Applicant of a high level

of skill in the art at the time the application was filed; and also no evidence presented

that all of the methods needed to practice the invention were well known.

Claim 29,30, 32, 33, and 34 are rejected under 35 U.S.C. 112, first paragraph, as

failing to comply with the enablement requirement. The claim(s) contains subject matter

which was not described in the specification in such a way as to enable one skilled in

the art to which it pertains, or with which it is most nearly connected, to make and/or use

the invention.

Claims 29,30, 32, 33, 34 are dependent on Claim 23 which cites a limitation for

'whereby rather than needing to store, and add to when necessary, the entire sequence

of references'.   The Examiner notes that Claim 23 describes not requiring storage for

said references.

Claim 29 cites a limitation for 'the method of claim 23 wherein a record is

maintained of the references'.   Claim 30 cites a limitation for 'the method of claim 23

wherein said desired information is received in its entirety and stored locally'.   Claim 32

cites a limitation for 'The method of claim 31 wherein a record is maintained of the

reference'.   Claim 33 cites a limitation for 'The method of claim 32 wherein said record

is stored at said database.'   The Examiner notes that Claims 29,30, 32, 33 recite

limitations that are contradictory and mutually exclusive to Claim 23.

Claim 32 cites a limitation 'wherein a record is maintained of the reference

corresponding to streaming media which has not been received completely because the

reception of said streaming media was stopped, said record indicating the number of

seconds of streaming media which was received and played before playback was

stopped.'   The Examiner notes that the Applicant Specification do not sufficiently

disclose how said feature is implemented and accomplished by the invention.

Claim 34 cites a limitation wherein a user can resume receiving said partially-

received streaming at the point at which playback was stopped, whereby an interrupted

word or sentence can be replayed in its entirety, followed by the remainder of said

partially-received streaming media. The Examiner notes that the Applicant Specification

do not sufficiently disclose how said feature is implemented and accomplished by the
invention.

Though the statute does not use the term "undue experimentation," it has been
interpreted to require that the claimed invention be enabled so that any person skilled in
the art can make and use the invention without undue experimentation. The test of
enablement is whether one reasonably skilled in the art could make or use the invention
from the disclosures in the patent coupled with information known in the art without
undue experimentation.

The Examiner notes that specification was not enabling with respect to the said
claims at issue, noting further that there was no considerable direction and guidance in
the specification; that there was no evidence presented by the Applicant of a high level
of skill in the art at the time the application was filed; and also no evidence presented
that all of the methods needed to practice the invention were well known.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly
claiming the subject matter which the applicant regards as his invention.

Claim 23 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite
for failing to particularly point out and distinctly claim the subject matter which applicant
regards as the invention.

The term "add to when necessary" in claim 23 is a relative term which renders the claim indefinite. The term "when necessary" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

Regarding Claim 23, the phrase "locating examples of said sequence of references " renders the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention.

Claim 23 cites a limitation 'whereby a user can unilaterally construct a reference to periodically-updated desired information which is available elsewhere on a network'. The Examiner respectfully suggests that the claim language may cause a person of ordinary skill in the art to misinterpret the claims. The Examiner notes that the user-constructed reference is created using a template, and is likely to be a URL reference. Furthermore the Applicant has not disclosed of any prior verification of the existence of the desired information. The Applicant has indicated that the references may be constructed in anticipation of and without prior verification of the existence of the desired information. The Examiner respectfully suggests that it is unclear whether the Applicant's user-constructed reference is 1) an alphanumeric character string that describes information, or 2) a valid link to multimedia content.

Claims 29,30, 32, 33, and 34 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 29,30, 32, 33, 34 are dependent on Claim 23 which cites a limitation for 'whereby rather than needing to store, and add to when necessary, the entire sequence of references'. The Examiner notes that Claim 23 describes not requiring storage for said references.

Claim 29 cites a limitation for 'the method of claim 23 wherein a record is maintained of the references'. Claim 30 cites a limitation for 'the method of claim 23 wherein said desired information is received in its entirety and stored locally'. Claim 32 cites a limitation for 'The method of claim 31 wherein a record is maintained of the reference'. Claim 33 cites a limitation for 'The method of claim 32 wherein said record is stored at said database.' The Examiner notes that Claims 29,30, 32, 33 recite limitations that are contradictory and mutually exclusive to Claim 23. The Examiner respectfully suggests that the contradictory and mutually exclusive language may lead a person of ordinary skill in the art to misinterpret said Claims.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 23-24, 29-31 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Eyal (US Patent 6389467), in view of Terek et al. (US Patent 6804700), hereinafter

referred to as Terek.

Eyal disclosed the features of the invention as described in the Claims shown

below.

23. (new) A method of compactly representing and exactly matching an existing

sequence of references to desired information available on a communications network,

said sequence of references changing in a predictable pattern, said method comprising

the steps of: (Figures 2-3, Figures 7-9, Figure 19, Column 5 Lines 5-35, Column 23

Lines 1-65, Column 32 Lines 40-65) a) locating examples of said sequence of

references, where each reference consists of; a non-changing part, which is at least

some of the characters of said reference which are the same for all references in said

sequence of references, (Column 23 Lines 1-65) d) storing said references in a

database, (Column 23 Lines 10-15, Figure 2 Item 245) and e) later applying an index

value to said references to construct any specific reference, whereby rather than

needing to store, and add to when necessary, the entire sequence of references to said

desired information, any specific reference can be constructed by applying said index

value to said customized template, (Column 23 Lines 45-50, Column 24 Lines 60-65)

and whereby a user can unilaterally construct a reference to periodically-updated

desired information which is available elsewhere on a network. (Column 3 Lines 45-65)

However Eyal did not disclose the method of Claim 23 where each reference, in

addition to the non-changing part, also has a changing part, which is the remaining

characters of said reference. Eyal does not disclose b) examining said changing part to

determine said predictable pattern, and c) creating a template, said template comprising

at least; said non-changing part, and one or more replacement indicators selected to

both indicate said predictable pattern, as well as the position in said reference where

said predictable pattern occurs.

Terek disclosed of a method for generating and assigning human-readable and

unique URLs to objects. Terek disclosed of generating and incorporating the human

readable descriptive portion of the object into a unique URL for the said object, while

maintaining a hash index in order keep track of previously modified object URLs. The

generated URLs consist of a static portion followed by a non-static portion which can be

used to form a template for a sequence of related URLs. (Figures 2-4, Column 7 Lines

35-65, Column 8 Lines 50-60, Column 9 Lines 30-65) Terek disclosed of a postfix

which is associated with the hash value, said postfix being appended to the newly

generated URL to make said URL unique. The postfix is modified in such a way that

makes it distinguishable from previously used postfixes in previously existing URLs. The

Examiner notes that the postfix is similar to the replacement indicators described by the

applicant, as the postfix may be used to represent an updated URL. (Column 2 Lines 1-

25 , Lines 35-65)

Terek disclosed the features of the invention as described in the Claims shown

below.

23. where each reference consists of a changing part, which is the remaining

characters of said reference, said changing part exactly matching those characters that

change in said sequence of references, b) examining said changing part to determine

said predictable pattern, c) creating a customized template, said template comprising at

least; said non-changing part, and one or more replacement indicators selected to both

indicate said predictable pattern, as well as the position in said reference where said

predictable pattern occurs. (Figures 2-4 , Column 7 Lines 35-65, Column 8 Lines 50-

60, Column 9 Lines 30-65, Column 10 Lines 1-65)

Eyal and Terek are analogous art because they both present concepts and

practices regarding identification, manipulation, and presention of a sequence of

references to information on the network, for the purpose of allowing users to access

the said information. It is respectfully suggested that at the time of the invention it would

have been obvious to a person of ordinary skill in the art to incorporate the teachings of

Terek regarding generating human readable 'meaningful descriptions', unique identifiers, tokens, postfixes, hash index values and appending said unique identifiers to the newly created URL or pre-existing URLs, into the method of Eyal . The suggested motivation for doing so would be , as Terek suggests, so that users do not have to open the object to determine the relevance of the object, thus wasting user time. The method suggested by Terek conveniently allows for generating unique URLs for both new and pre-existing URLs. (Column 1 Lines 55-65)

Eyal disclosed the features of the invention as described in the Claims shown below.

24.(new) The method of claim 23 wherein said desired information is stored at one of many content providers, and a plurality of said references are stored in said database, whereby a user can retrieve a reference to locally apply an index value to unilaterally construct any specific reference to periodically-updated desired information which the user can then directly retrieve from a content provider. (Column 13 Lines 35-45, Column 14 Lines 20-30, Column 3 Lines 45-65)

29. (new) The method of claim 23 wherein a record is maintained of the references corresponding to information which has been completely received at an earlier time, (Figure 9 Column 25 Lines 20-65, Column 10 Lines 1-20, Column 24 Lines 60-65, Column 26 Lines 5-20) whereby users can utilize said record to distinguish between

information which has and has not been previously received, whereby users can choose to only receive information which they have not received before.

30. (new) The method of claim 23 wherein said desired information is received in its entirety and stored locally by users before being utilized, whereby said desired information can utilized at a later time. (Column 27 Lines 1-45, Column 28 Lines 35-40, Column 28 Lines 50-60)

31. (new) The method of claim 23 wherein said information is streaming media which is played substantially as it is received, whereby said streaming media can be utilized sooner, while it is still being received. (Column 10 Lines 1-65)

Claim 25-28, 32-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eyal (US Patent 6389467), in view of Terek et al. (US Patent 6804700), hereinafter referred to as Terek, further in view of Geagan et al. (US Patent 6263371), hereinafter referred to as Geagan.

The combined teachings of Eyal and Terek substantially disclosed the features

of the invention, as applied above, and furthermore as described in the Claims shown

below.

25. (new) The method of claim 23 wherein said replacement indicators produce output

selected from the group consisting of the: g) count value, relative to a specified starting

number, and with or without a leading zero, both as specified when selected where the

above date-related values are relative to either a specified fixed date or to the date

when said created customized template is used to construct a specific reference, as

specified when said customized template is created, and whereby customized

templates can be created which include any combination of date and count

components. (See Eyal Figures 2-3, Figures 7-9, Column 5 Lines 5-35, Column 23

Lines 1-65; See Terek Figures 2-4, Column 7 Lines 35-65, Column 8 Lines 50-60,

Column 9 Lines 30-65) The Examiner highlights Terek 's statement that says - 'Methods

for modifying a value so that it always unique when compared to previous values,

including numerically incrementing the value each time it is used, are well known in the

art.' (Terek Column 9 Lines 40-45)

However the combined teachings of Eyal and Terek do not disclose date and

time indicators as replacement indicators.

The Examiner notes that Claims 25-28, 32-34 are referring to 1) indicators that

are commonly used, in various combinations and formats, for generating timestamps,

and therefore the said indicators are treated uniformly as timestamp values; and 2) an

index value indicating an offset relative to a singular reference point. The Examiner

notes that the use of timestamps, in various combinations and formats, to provide

unique incremental values is well known in the art.

Geagan discloses of a method and apparatus for filling in information gaps in

data streams, as applied to streaming content delivered via the Internet. Geagan

discloses that missing information may be derived from the other data streams received

from the content source, and the said derivation may be made on the basis of

identifying characteristics (such as sequence number and/or timestamps) that are

common throughout each of the data streams received from the content source. (Figure

4, Column 11 Lines 1-40, Column 12 Lines 40-55) Geagan discloses that by

comparing different offsets and correlating the offsets with an absolute reference clock,

the missing sequence of information may be rebuilt and inserted into the streaming

content at the appropriate time. The Examiner notes that since timestamps often

contain date and time data, the sequencing algorithm may therefore also use an

reference date instead of a reference clock.(Column 12 Lines 5-25) Geagan discloses

of sequencing packets from an absolute starting point, such that the system is able to

identify the interval between the updates in the data stream. (Column 13 Lines 1-10)

Geagan discloses of examining each stream (or some number thereof) and choosing

the desired packet from any stream that included it. (Column 13 Lines 55-65) The

Examiner notes that the sequencing process, the examination process, and seaming

process described by Geagan must inherently calculate an offset value, in either time, date, or other alphanumerical formats, in order to work as described. Geagan discloses of maintaining a record of the information already transmitted, and being able to recall where the information was interrupted, and providing the information that was lost during the interruption. (Column 9 Lines 45-65, Column 10 Lines 20-55)

Geagan disclosed the features of the invention as described in the Claims shown below.

25. (new) The method of claim 23 wherein said replacement indicators produce output selected from the group consisting of the: a) date, with or without a leading zero for single-digit dates, as specified when selected ; b) month number, with or without a leading zero for single-digit months, as specified when selected ; c) three-letter abbreviation for the month, with capitalization specified when selected; d) full month name, with capitalization specified when selected; e) week number, with or without a leading zero for single-digit weeks, as specified when selected; f) year, as four digits or just the least significant two digits, as specified when selected; (Figure 4, Column 11 Lines 1-40, Column 12 Lines 40-55) both as specified when selected where the above date-related values are relative to either a specified fixed date or to the date when said created customized template is used to construct a specific reference, as specified when said customized template is created, (Column 12 Lines 5-25) and whereby customized templates can be created which include any combination of date and count

components. The Examiner notes that all of the above indicators are commonly used, in various combinations and formats, for generating timestamps, and therefore the said indicators are treated uniformly as timestamp values. The use of timestamps, in various combinations and formats, to provide unique incremental values is well known in the art.

Eyal , Terek and Geagan are analogous art because they present concepts and practices regarding presentation of a sequence of references to information, in the context of providing streaming audio source and playback of said streaming audio. It is respectfully suggested that at the time of the invention it would have been obvious to a person of ordinary skill in the art to combine the teachings of Geagan regarding 1) use of timestamps as unique identifiers and 2) use of offsets for locating and searching for indexed and uniquely identified objects, into the combined methods of Eyal and Terek . By the combination of Eyal , Terek , and Geagan the user can control when the last said predetermined number of seconds of information can be repeated to aid in recalling where the information was interrupted.

The suggested motivation for doing so would have been, as Geagan suggests, would be to facilitate playback for the streaming content in case of transmission errors or playback error. (See Geagan Column 12 Lines 55-60) Terek also suggests that by performing the search for missing information based on a hash value instead of the entire original value, the search is made more efficient. (See Terek Column 2 Lines 50-55)

The combined teachings of Eyal and Terek substantially disclosed the features

of the invention, as applied above, and furthermore as described in the Claims shown

below.

26. (new) The method of claim 23

27.(new) The method of claim 23

28. (new) The method of claims 26 or 27

However the combined teachings of Eyal and Terek do not disclose using

offset values to generate replacement indicators and construct references.

The Examiner notes that Claims 25-28, 32-34 are referring to 1) indicators that

are commonly used, in various combinations and formats, for generating timestamps,

and therefore the said indicators are treated uniformly as timestamp values; and 2) an

index value indicating an offset relative to a singular reference point. The Examiner

notes that the use of timestamps, in various combinations and formats, to provide

unique incremental values is well known in the art.

Geagan discloses of a method and apparatus for filling in information gaps in

data streams, as applied to streaming content delivered via the Internet. Geagan

discloses that missing information may be derived from the other data streams received

from the content source, and the said derivation may be made on the basis of

identifying characteristics (such as sequence number and/or timestamps) that are

common throughout each of the data streams received from the content source. (Figure

4, Column 11 Lines 1-40, Column 12 Lines 40-55) Geagan discloses that by

comparing different offsets and correlating the offsets with an absolute reference clock,

the missing sequence of information may be rebuilt and inserted into the streaming

content at the appropriate time. The Examiner notes that since timestamps often

contain date and time data, the sequencing algorithm may therefore also use an

reference date instead of a reference clock.(Column 12 Lines 5-25) Geagan discloses

of sequencing packets from an absolute starting point, such that the system is able to

identify the interval between the updates in the data stream. (Column 13 Lines 1-10)

Geagan discloses of examining each stream (or some number thereof) and choosing

the desired packet from any stream that included it. (Column 13 Lines 55-65) The

Examiner notes that the sequencing process, the examination process, and seaming

process described by Geagan must inherently calculate an offset value, in either time,

date, or other alphanumerical formats, in order to work as described. Geagan

discloses of maintaining a record of the information already transmitted, and being able

to recall where the information was interrupted, and providing the information that was

lost during the interruption. (Column 9 Lines 45-65, Column 10 Lines 20-55)

Geagan disclosed the features of the invention as described in the Claims shown

below.

26. (new) The method of claim 23 wherein said index value is a numerical offset relative to the current date, whereby each sequential index value applied to said customized template generates a reference which exactly matches the next in said existing sequence of references. (Geagan - Column 11 Lines 1-30,Column 13 Lines 1-65)

27.(new) The method of claim 23 wherein said index value is a numerical offset relative to a specified absolute date, whereby each sequential index value applied to said customized template generates a reference which exactly matches the next in said existing sequence of references. (Geagan - Column 11 Lines 1-30, Column 13 Lines 1-65)

28. (new) The method of claims 26 or 27 wherein an increment value is specified to indicate the interval between each of said existing sequence of references, whereby references can be constructed from said customized template by multiplying an offset value by said increment value to generate the required index value. (Geagan - Column 11 Lines 1-30, Column 13 Lines 1-65)

Eyal , Terek and Geagan are analogous art because they present concepts and practices regarding presentation of a sequence of references to information, in the context of providing streaming audio source and playback of said streaming audio. It is respectfully suggested that at the time of the invention it would have been obvious to a

person of ordinary skill in the art to combine the teachings of Geagan regarding use of

offsets for locating and searching for indexed and uniquely identified objects, into the

combined methods of Eyal and Terek . By the combination of Eyal , Terek , and

Geagan the user can control when the last said predetermined number of seconds of

information can be repeated to aid in recalling where the information was interrupted.

The suggested motivation for doing so would have been, as Geagan suggests,

would be to facilitate playback for the streaming content in case of transmission errors

or playback error. (See Geagan Column 12 Lines 55-60) Terek also suggests that by

performing the search for missing information based on a hash value instead of the

entire original value, the search is made more efficient. (See Terek Column 2 Lines

50-55)

The combined teachings of Eyal and Terek substantially disclosed the features

of the invention, as applied above, and furthermore as described in the Claims shown

below.

32. (new) The method of claim 31 wherein a record is maintained of the reference

corresponding to streaming media which has not been received completely because the

reception of said streaming media was stopped, said record indicating the number of

seconds of streaming media which was received and played before playback was

stopped. (Figure 11, Figure 21, Column 27 Lines 1-65, Column 28 Lines 1-60)

However the combined teachings of Eyal and Terek do not disclose use of

offsets for locating and searching for indexed and uniquely identified objects.

The Examiner notes that Claims 25-28, 32-34 are referring to 1) indicators that

are commonly used, in various combinations and formats, for generating timestamps,

and therefore the said indicators are treated uniformly as timestamp values; and 2) an

index value indicating an offset relative to a singular reference point. The Examiner

notes that the use of timestamps, in various combinations and formats, to provide

unique incremental values is well known in the art.

Geagan discloses of a method and apparatus for filling in information gaps in

data streams, as applied to streaming content delivered via the Internet. Geagan

discloses that missing information may be derived from the other data streams received

from the content source, and the said derivation may be made on the basis of

identifying characteristics (such as sequence number and/or timestamps) that are

common throughout each of the data streams received from the content source. (Figure

4, Column 11 Lines 1-40, Column 12 Lines 40-55) Geagan discloses that by

comparing different offsets and correlating the offsets with an absolute reference clock,

the missing sequence of information may be rebuilt and inserted into the streaming

content at the appropriate time. The Examiner notes that since timestamps often

contain date and time data, the sequencing algorithm may therefore also use an

reference date instead of a reference clock.(Column 12 Lines 5-25) Geagan discloses

of sequencing packets from an absolute starting point, such that the system is able to

identify the interval between the updates in the data stream. (Column 13 Lines 1-10)

Geagan discloses of examining each stream (or some number thereof) and choosing

the desired packet from any stream that included it. (Column 13 Lines 55-65) The

Examiner notes that the sequencing process, the examination process, and seaming

process described by Geagan must inherently calculate an offset value, in either time,

date, or other alphanumerical formats, in order to work as described. Geagan

discloses of maintaining a record of the information already transmitted, and being able

to recall where the information was interrupted, and providing the information that was

lost during the interruption. (Column 9 Lines 45-65, Column 10 Lines 20-55)

Geagan disclosed the features of the invention as described in the Claims shown

below.

32. (new) The method of claim 31 whereby, based on the content of said record, a user

can construct a reference which specifies that said streaming media is to be played

beginning said number of seconds from its beginning, whereby said user can resume

receiving said streaming media starting at the point at which playback was stopped.

(Geagan - Column 9 Lines 45-65, Column 10 Lines 20-55, Column 11 Lines 1-30,

Column 13 Lines 1-65)

Eyal , Terek and Geagan are analogous art because they present concepts and

practices regarding presentation of a sequence of references to information, in the

context of providing streaming audio source and playback of said streaming audio. It is

respectfully suggested that at the time of the invention it would have been obvious to a

person of ordinary skill in the art to combine the teachings of Geagan regarding 1) use

of timestamps as unique identifiers and 2) use of offsets for locating and searching for

indexed and uniquely identified objects, into the combined methods of Eyal and Terek .

By the combination of Eyal , Terek , and Geagan the user can control when the last

said predetermined number of seconds of information can be repeated to aid in recalling

where the information was interrupted.

The suggested motivation for doing so would have been, as Geagan suggests,

would be to facilitate playback for the streaming content in case of transmission errors

or playback error. (See Geagan Column 12 Lines 55-60) Terek also suggests that by

performing the search for missing information based on a hash value instead of the

entire original value, the search is made more efficient. (See Terek Column 2 Lines

50-55)

The combined teachings of Eyal and Terek substantially disclosed the features

of the invention, as applied above, and furthermore as described in the Claims shown

below.

33. (new) The method of claim 32 wherein said record is stored at said database and

can be retrieved from anywhere on said communications network, whereby a user at a

first location on said communications network can begin receiving streaming media and

later stop receiving said streaming media and still later, from a second location

elsewhere on said communications network and based on the content of said retrieved

record, said user can resume receiving said partially-received streaming media starting

at the point at which playback was stopped. (Figure 11, Figure 21, Column 27 Lines 1-

65, Column 28 Lines 1-60, Column 32 Lines 15-35)

34. (new) The method of claims 32 or 33 wherein a user can resume receiving said

partially-received streaming at the point at which playback was stopped, whereby an

interrupted word or sentence can be replayed in its entirety, followed by the remainder

of said partially-received streaming media. (Figure 11, Figure 21, Column 27 Lines 1-65,

Column 28 Lines 1-60, Column 32 Lines 15-35)

    However the combined teachings of Eyal and Terek do not disclose use of

offsets for locating and searching for indexed and uniquely identified objects.

    Geagan disclosed the features of the invention as described in the Claims shown

below.

34. (new) The method of claims 32 or 33 wherein a user can resume receiving said

partially-received streaming media a predetermined number of seconds prior to the

point at which playback was stopped, (Geagan - Column 9 Lines 45-65, Column 10

Lines 20-55, Column 11 Lines 1-30, Column 13 Lines 1-65) whereby an interrupted

word or sentence can be replayed in its entirety, followed by the remainder of said

partially-received streaming media.

Response to Arguments

Applicant's arguments filed 04/08/2005 have been fully considered but they are

not persuasive. The reasons for non-persuasiveness are set forth below.

The Examiner acknowledges the change in the Title of the Invention.

The Applicant suggests that Eyal does not teach any analysis of the URLs

themselves, as is crucial to the present invention. Eyal does not teach looking for

patterns in media URLs. The Applicant suggests that in contrast to Eyal, using the

present invention, only a single template would be required to represent any number of

URLs in a sequence (specification, pages 9-10).

In response to applicant's arguments against the references individually, one

cannot show nonobviousness by attacking references individually where the rejections

are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208

USPQ 871 (CCPA 1981); *In re Merck & Co.,* 800 F.2d 1091, 231 USPQ 375 (Fed. Cir.

1986). The Examiner notes that Eyal teaches looking for patterns and metadata in

media URLs (Eyal Column 34 Lines 40-45, Column 35 Lines 35-55, Column 36 Lines

35-55) and presenting a sequence of URLs for sequential playback. Terek teaches of

a 'tentative URL' for an object that may be stored on a lookup table and creating other

URLs based on the combination of said 'tentative URL' and a human-readable identifier that is appended in the form of a URL postfix. The Examiner notes that once the tentative URL is established and is stored in a URL lookup table, it would have been obvious that the process of generating other URLs based on said tentative URL using Terek's URL generation module may be performed at any time.

The Applicant suggests that in contrast to Eyal, the present invention teaches not only constructing URLs to periodically-updated media before any parsing of a web page occurs, but even before the URL is even posted to a web page. That is, the template of the present invention can be used to reference desired information as soon as it becomes available, without waiting for a search engine, such as Eyal's metacrawler to re-parse every page (specification, bottom of page 10, top of page 11, and 3,d bullet on page 19).

The Examiner respectfully disagrees with the Applicant and notes that the concept of a user-constructed URL that is not parsed from a web page is available to anyone using a browser and is well known in the art.

The Applicant suggests that in contrast to Eyal, constructing references to such an archive of a sequence of desired information is exactly the goal of the present invention. Specifically, the present invention teaches recognizing patterns in the media URLs (specification, URLs 103 in FIG. 1 and page 9, second paragraph).

The Applicant suggests that while some manipulation of play-lists is taught (Column 13 Lines 12-16), Eyal does not teach referencing new media items before they have been posted on a web page and parsed. In contrast, the present invention teaches utilizing an increment value (specification, pages 11-12) to construct references to media without said references even being posted on a web page. Simply specifying an offset value enables any of the sequence of references to media to be constructed.

The Applicant suggests that the present invention teaches many important features not taught by Eyal. For example, only the resent invention teaches referencing the following: a) Any number of related URLs by storing only a single template, rather than requiring a database to store each specific URL of a sequence of related URLs. b) New media as soon as it is available and without first having to reparse a content provider's web page to find the URL. c) Any specific reference of a sequence by specifying a single index value, rather than having to look through a long list of references.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). The Examiner notes that Eyal teaches looking for patterns and metadata in media URLs (Eyal Column 34 Lines 40-45, Column 35 Lines 35-55, Column 36 Lines 35-55) and presenting a sequence of URLs for sequential playback. Terek teaches of

a 'tentative URL' for an object that may be stored on a lookup table and creating other

URLs based on the combination of said 'tentative URL' and a human-readable identifier

that is appended in the form of a URL postfix. (Terek Column 7 Lines 20-65) The

Examiner notes that once the tentative URL is established and is stored in a URL

lookup table it would have been obvious that the process of creating other URLs based

on said tentative URL may be performed at any time.

The Applicant suggests that even when play-lists are discussed (Column 30

Lines 2937), Eyal does not teach recording which media have already been played. In

fact, Eyal compares playlists to playing an album (Column 30 Lines 35-37) which plays

the same every time, with no memory means to record what has already been heard.

That is, Eyal does not teach recording what media has been played. In contrast, the

present invention teaches recording what media has already been played (specification

page 17, 3rd bullet). Based on this and other factors, the present invention teaches

several situations when media will not be played as a result of previously being played

(specification FIG. 4, step 407, described on page 18).

The Examiner respectfully disagrees with the Applicant's suggestion that Eyal

does not record what media has been played. The Examiner notes that a playlist may

also act a record of what has already been heard. In Column 30 Lines 30-55 Eyal

states that the media clips are played back consecutively and automatically, so that the

user experiences continuous media playback, thereby indicating that the system of Eyal

is aware of what has already been played. In Column 37 Lines 5-30 Eyal disclosed of a

playback pause feature, wherein reselecting the pause causes the media creation to be

played back from the portion where playback was paused.

The Applicant suggests that Terek is not applicable to the present invention, as

the present invention requires that there already be a reference assigned to the desired

information. The present invention teaches unilaterally constructing references to

sequences of such desired information, allowing a simple index value to be specified to

construct any reference in a sequence of references to such desired information. The

present invention can even construct references to desired information that has not yet

been created (such as tomorrow's news report), so a central server does not need to be

contacted to generate references to subsequently created desired information.

The Applicant suggests that the postfix method taught by Terek (Column 10

Lines 30-44) is the direct opposite of the goal of the present invention. Terek teaches a

method of creating unique URLs, the present invention teaches creating URLs that must

not be unique, that is, they must exactly match those created and named by others.

The Examiner respectfully disagrees with the Applicant's suggestion. Terek

disclosed generating the URLs for the purpose of enabling other applications to use the

said URL for access to desired object.   Terek disclosed assigning unique URLs but

also generating a sequence of URLs from a 'tentative' URL. In Column 12 Lines 1-10,

Terek states that the method is ideally suited for situations such as upgrading and

replication in which many objects are to be assigned a URL within a relatively short

period of time. While it would seem that Terek was talking from a content provider's point of view, the Examiner suggests that it would have obvious that a user application wanting to access said numerous objects, said application such as the system disclosed by Eyal, upon obtaining knowledge of Terek's URL generator module, would have replicated the process to facilitate access to said numerous objects.

Applicant submits that the methods taught by Geagan are not applicable to the present invention. Geagan teaches that streaming media packets have sequence numbers or timestamps (Column 7 Lines 56-59), and these are used to determine whether all packets are present and in the correct order. The Applicant suggests that Geagan solves a different problem (making sure packets are in the correct and complete sequence), and therefore has no need to calculate or determine the time offsets of packets. The Applicant suggests that the timestamps taught by Geagan are only for the purpose of finding missing packets. This is not a concern of the present invention, as the present invention has no teaching, limitations, requirements or capabilities concerning lost packets or transmission errors. Conversely, Geagan does not teach determining the total number of seconds from the beginning of a media stream (as is required and taught by the present invention), and there are several complexities in attempting to do so using the methods taught by Geagan.

The Examiner respectfully disagrees with the Applicant and notes that a correct and complete sequence of packets belonging to streaming multimedia, in order to be understood by the recipient, must be received in a particular order with respect to a

reference point in time. The Examiner notes that Applicant Claim 25 cites several

indicators of date and time as part of the reference URLs in the invention.

Furthermore Applicant Claims 32 and 33 describe stopping and resuming playback at

the point at which playback was stopped, thereby indicating playback control at the

packet level and not just the URL level. The Examiner respectfully concludes that the

invention, in order to work correctly, must control and track the packet sequence, in

order to be able to restart playback at the correct packet.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time
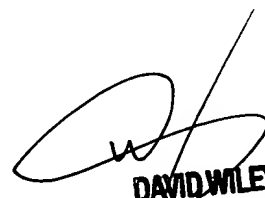
policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Greg Bengzon whose telephone number is (571) 272-

3944. The examiner can normally be reached on Mon. thru Fri. 8 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, David Wiley can be reached on (571) 272-3923. The fax phone number for

the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the

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Business Center (EBC) at 866-217-9197 (toll-free).

gcb

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